

REMARKS

As a preliminary matter, Applicants have amended the preamble of claim 1 without narrowing the scope of the claim to correct a minor typographical error. No new matter has been added.

The Examiner rejected claim 1 under §102(a) as anticipated by Elliott. Claim 1 is directed to a base station controller system comprising a plurality of resource pools to support wireless communication with a plurality of wireless access terminals, a switching fabric, and a system controller. The claimed switching fabric is configurable to provide redundant and independent access to each resource pool such that resources from each pool are independently selectable from resources in the other resource pools. The system controller configures the switching fabric to selectively allocate the resources to facilitate the establishment of call-processing flows through the base station controller (e.g., during call establishment procedures).

The only element in Elliott that directly relates to communicating with wireless access terminals is the Network Access Function (NAF) 220. The function of the NAF in Elliott mirrors that of a base station controller (BSC). Elliott states that the NAF “consolidates traffic to and from access devices (e.g., base transceiver stations, digital loop carriers, and so forth), and interfaces these access devices with ATM fabric 216.” *Elliott*, col. 5, ll. 25-29. Elliott does not disclose that the NAF uses shared resources from a plurality of resource pools. Nor does Elliott teach that the NAF includes a system controller that configures a switching fabric to provide redundant and independent access to each resource pool such that resources from each pool are independently selectable from resources in the other resource pools. In fact, Elliott never mentions how the NAF performs internal resource allocation.

The Examiner equates the Element Manager Function (EMF) 204 to the claimed system controller. The basis for this argument rests on column 4, lines 61-67 of Elliott, which reads,

"[t]he topology depicted in FIG. 2, includes an Element Manager Function 204, also connected to ATM fabric 216, that provides operations, administration, maintenance, and provisioning functions for the network. The element management architecture facilitates real-time management of resources required for call processing." Elliott provides no further explanation of the EMF or its function beyond this passage. This brief mention says nothing about configuring a switching fabric to provide redundant and independent access to each resource pool such that resources from each pool are independently selectable from resources in the other resource pools. In fact, Elliott never hints that the EMF is even capable of communicating with a wireless access terminal or that the EMF is ever associated with a BSC. The EMF of Elliott does not communicate with wireless access terminals. Rather, network operators use the EMF to provision the network, which means nothing in the context of the claimed invention. As stated above, the only element in Elliott that can arguably relate to communications with wireless access terminals is the NAF, and the NAF does not include the requisite system controller.

The Examiner also asserts that Elliott discloses the claimed switching fabric as element 216 in Figure 2. However, the cited element is an Asynchronous Transfer Mode (ATM) fabric that integrates wireless and wireline networks. *Elliott*, col. 3, ll. 6-8. Far from being the claimed configurable switching fabric, Elliott specifically defines the ATM fabric as the physical structure of an ATM network that interconnects physical and logical communications channels of different networks. *Elliott*, col. 2, ll. 46-50. When Elliott refers to the ATM fabric, Elliott means the physical structure of the ATM network as a whole. The ATM fabric provides a transport mechanism for communications signals between the different networks. Elliott does not mean, nor can Elliott be interpreted to mean, that the ATM fabric provides redundant and independent access to each of a plurality of resource pools. This aspect is never mentioned by Elliott.

Simply put, the reasons purporting to support the §102 rejection of claim 1 are speculative. Elliott does not support the contention that the EMF is a system controller that configures a switching fabric to provide redundant and independent access to each resource pool such that resources from each pool are independently selectable from resources in the other resource pools. Nor does Elliott support the contention that the ATM fabric is a configurable switching fabric that provides the redundant and independent access to each resource pool. Elliott simply does not support a §102 rejection of claim 1 because Elliott does not teach each element of claim 1. Therefore, all Elliott-based rejections to claim 1 and to the dependent claims necessarily fail.

The Examiner also rejected claim 21 under §102 citing Elliott and reasons similar to that of claim 1. Claim 21 is a method claim that corresponds to claim 1 and recites providing a plurality of resource pools, each providing one of the pluralities of call processing functions, and configuring a switching fabric to allocate a specific combination of resources selected from one or more of the resource pools to each call being routed through the base station controller. For reasons similar to those stated above, Elliott fails to anticipate claim 21 under §102, and thus, all Elliott-based rejections of claim 21 and of its dependent claims necessarily fails.

The Examiner also rejected claim 9 under §103 as being obvious in view of Elliott, Marin, and Ji. Claim 9 recites a BSC organized as a hub subrack and at least one processing subrack. The hub subrack comprises a central switching resource and system controller, while the processing subrack carries a plurality of resource pools. The system controller allocates selected combinations of specific resources from one or more of the plurality of resource pools in the processing subrack.

For reasons similar to those stated above, none of the references teaches or suggests, alone or in combination, the claimed system controller and configurable switching fabric. As such, the §103 rejections to claim 9 and its dependent claims fail as a matter of law.

In addition, however, the §103 rejections fails for another reason. The Examiner equates the call processing function 206 to the claimed plurality of resource pools having at least one call processing function. However, the only mention in Elliott of these functions is that they “[provide] service logic for supporting calls to and from the ATM fabric.” *Elliott*, col. 5, ll. 1-3. Beyond that sentence, Elliott does not address the call processing function. Elliott does not teach or suggest how these resources are allocated or what network entity is responsible for allocating them. Even when one considers the multiple call processing functions 206 and 208 of Elliott, there is no suggestion that they do anything more than handle high call processing loads. The assertion that the call processing function of Elliott is part of a plurality of resource pools carried in a processing subrack at a BSC is wholly speculative. There is no basis in Elliott that supports the assertion.

Marin discloses a base station architecture, which the Examiner asserts teaches the claimed hub subrack/processing subrack architecture. Nothing in Marin is relevant to the claimed architecture. Even though the Examiner alleges that it would be obvious to divide the Elliott call processing functions onto different subracks, there is no attempt in the Office Action to define how such a division could be accomplished or even if such a configuration could be reasonably successful in the context of Elliott. Elliott simply discloses that the call processing functions are connected to an ATM fabric. Elliott does not mention how those resources are configured, how they are allocated, or what entity in the network is responsible for allocating those call processing functions. Marin simply discloses an arrangement for cards. Without knowing these details about the Elliott call processing functions, it is wholly speculative to assert that they may fit in a hub subrack/processing subrack architecture as claimed. With all due respect, the there is nothing in Marin (or Elliott) that supports what the Office's position.

The final reference, Ji, discloses a method of failure recovery at a base transceiver station (BTS). In Ji, a channel allocator replaces failed channel elements with another available

channel element responsive to detecting a failure. Whatever Ji teaches, it is irrelevant to the claimed invention. Ji simply replaces failed channel elements with operable channel elements. This has nothing to do with the selective allocation of combinations of specific resources from one or more of a plurality of resource pools to provide desired call processing for a plurality of wireless access terminals. One clear indicator of this fact is that the Ji error recovery method occurs within the realm of the BTS. The BTS is not a BSC, nor does it perform the functionality of the BSC. As above, the assertion that Ji applies at all to the claimed invention is speculative.

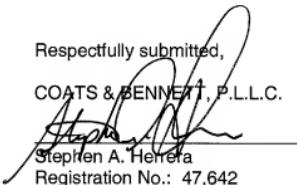
Respectfully, the §103 rejection of claim 9 is based on mere conjecture. The Federal Circuit has repeatedly held that a *legally proper* §103 rejection must consider the references as a whole. In this case, the rejection simply extracts selected portions of the references while excluding other portions, and alleges that one skilled in the art would be motivated to combine the three references. The Office Action does not attempt to describe how a skilled artisan could combine the references to produce the claimed invention, or even if such a combination could be reasonably expected to succeed. The §103 rejection of claim 9 is based on impermissible hindsight reconstruction.

None of the references, alone or in combination, teaches or suggests every element of claim 9. Further, there is no motivation to combine the references. As such, the §103 rejection of claim 9 and its dependent claims fails as a matter of law and should be withdrawn.

In light of the foregoing remarks, Applicants respectfully request the allowance of all pending claims.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

  
Stephen A. Herrera

Registration No.: 47,642

Dated: June 21, 2006

P.O. Box 5  
Raleigh, NC 27602  
Telephone: (919) 854-1844  
Facsimile: (919) 854-2084